

***Application Part A
Project Description, Organizational, Financial and Legal
Information***

A-1 Urban Water Conservation Grant Application Cover Sheet1. Applicant (Organization or affiliation): Compton Municipal Water Department2. Project Title: Compton CII WUE Project

3. Person authorized to sign and submit proposal:

Name, Title	<u>Kambiz Shoghi, General Manager</u>
Mailing address	<u>205 S. Willowbrook Ave. Compton, CA 90220</u>
Telephone	<u>(310) 605-5595</u>
Fax	<u>(310) 763-4567</u>
E-mail	<u>kshoghi@comptoncity.org</u>

4. Contact person (if different):

Name, Title	<u>Kourt D. Williams, Exec. Dir. – ExPERT, Inc.</u>
Mailing address	<u>17140 S Avalon Blvd, #320 Carson, CA 90746</u>
Telephone	<u>(310) 660-0280</u>
Fax	<u>(310) 660-0282</u>
E-mail	<u>expertinc@aol.com</u>

5. Funds requested (dollar amount): \$550,0006. Applicant funds pledged (local cost share) (dollar amount):
\$50,0007. Total project costs (dollar amount): \$600,0008. Estimated net water savings (acre-feet/year): 356.63Estimated total amount of water to be saved (acre-feet):
Over 10 years 3,566Benefit/cost ratio of project for applicant: 4.14
Estimated \$/acre-feet of water to be saved: 1,829,3589. Project life (month/year to month/year): 10/03 – 9/0510. State Assembly District where the project is to be conducted: 52nd11. State Senate District where the project is to be conducted: 25th12. Congressional District(s) where the project is to be conducted: 37th13. County where the project is to be conducted: Los Angeles

14. Do the actions in this application involve physical changes in land use, or potential future changes in land use?

(a) Yes _____

(if yes, complete the land use check list at

http://www.calfed.water.ca.gov/adobe_pdf/Questionnaires_EC_Permits_Land_Use.pdf and submit it with the proposal(b) No X

A-2 Application Signature Page

By signing below, the official declares the following:

The truthfulness of all representations in the application;

The individual signing the form is authorized to submit the application on behalf of the applicant;

The individual signing the form read and understood the conflict of interest and confidentiality section and waives any and all rights to privacy and confidentiality of the application on behalf of the applicant; and

The applicant will comply with all terms and conditions identified in this Application Package if selected for funding.

Kambiz Shoghi
General Manager
City of Compton
Municipal Water Department

Date

A-3 Application Checklist

Complete this checklist to confirm all sections of this application package have been completed.

Part A: Project Description, Organizational, Financial and Legal Information

- ☒ A-1 Urban Water Conservation Grant Application Cover Sheet
- ☒ A-2 Application Signature Page
- ☒ A-3 Application Checklist
- ☒ A-4 Description of project
- ☒ A-5 Maps
- ☒ A-6 Statement of work, schedule
- ☒ A-7 Monitoring and Evaluation
- ☒ A-8 Qualifications of the Applicant and Cooperators
- ☒ A-9 Innovation
- ☒ A-10 Agency Authority
- ☒ A-11 Operations and Maintenance

Part B: Engineering and Hydrologic Feasibility (construction projects only)

- ☐ B-1 Certification statement
- ☐ B-2 Project reports and previous studies
- ☐ B-3 Preliminary project plans and specifications
- ☐ B-4 Construction inspection plan

Part C: Plan for Environmental Documentation and Permitting

- ☐ C-1 CEQA/NEPA
- ☐ C-2 Permits, easements, licenses, acquisitions, and certifications
- ☐ C-3 Local land use plans
- ☐ C-4 State and local statutes and regulations

Part D: Need for Project and Community Involvement

- ☒ D-1 Need for project
- ☒ D-2 Community involvement, support, opposition

Part E: Water Use Efficiency Improvements and Other Benefits

- ☒ E-1 Water use efficiency improvements
- ☒ E-2 Other project benefits

Part F: Economic Justification, Benefits to Costs Analysis

- ☒ F-1 Net water savings
- ☒ F-2 Project budget and budget justification
- ☒ F-3 Economic efficiency
- ☒ Benefit/Cost Analysis Tables 1; 2; 3; 4a, 4b, 4c, 4d; and 5

A-4 Description of Project

The Compton CII Water-Use Efficiency Project will be conducted by the City of Compton Municipal Water Department in cooperation with the Executive Partnership for Environmental Resources Training (ExPERT), Inc. By striking a balance between community outreach, capacity building, and community-based education and training through the implementation of cost effective actions to conserve and recycle water, this project is designed to ensure project goals and objectives produce demonstrable results directly linked to CALFED objectives, in general, and established Urban Water Best Management Practices (BMPs), in particular. This is a prime example of synergistic collaboration between state and local government and the community at-large.

The project will consist of two primary components providing multiple quantitative and qualitative benefits. The first component implements targeted commercial/ industrial/institutional (CII) water-use surveys. At least ten percent (10%) of high-water using CII accounts will be identified and directly contacted for participation in the water-use survey component. Water-use surveys will include a site visit, an evaluation of all water-using apparatus and processes, and a customer report identifying recommended efficiency measures, their expected payback, and available agency incentives. In conjunction with the recommended efficiency measures resulting from the water-use surveys, the second component of the project will implement a CII customer incentives program. Incentives will be offered to CII customers in the form of free retrofits of Ultra Low-flush Toilets (ULFTs)/Urinals, pre-rinse spray valves, and water pressurized brooms. Costs involving the purchase and installation of project-specific equipment or other water saving devices are included in the total project costs. Each project component will be conducted in accordance with BMPs for CII accounts, as defined by the California Urban Water Conservation Council (CUWCC).

Within one year of the survey, a follow-up phone call or visit will be conducted with those customers who received a survey and implemented recommended measures. Successful implementation of the first two components of this project is anticipated to result in a 10% reduction of the use of baseline CII water use within 10 years of the completion of the project.

In addition to quantitative benefits, various qualitative benefits are also achieved. Based on the success of ExPERT's current Water Education and Training (WET) model, individuals from the community to be served are recruited and trained in all phases of project implementation. In addition to project specific training, life skills training is also delivered (i.e., CPR, conflict resolution, communications, team-building, customer service, etc.). A primary by-product of this model is the creation of a pool of technically skilled, competent, and conscientious individuals equipped to enter careers in resources management fields. This strategy has proven to be one of the most cost effective approaches of increasing water-use efficiency, developing community awareness, and will serve to establish and maintain community capacity (i.e., socio-economic benefits) well beyond this 2-year project cycle.

A-5 Maps

This section is not applicable and was intentionally left blank.

A-6 Statement of Work, Schedule

The project schedule, illustrated in Table A-6, identifies the proposed activities and associated timing requirements of major tasks, and project deliverables.

A-7 Monitoring and Evaluation

Continuous evaluation is maintained on both an internal and external basis. Project results/effects are documented, reported to, monitored and assessed by Compton Water Department staff, ExPERT's Board of Directors and its Community Advisory Committee. Monthly and quarterly project reviews will be conducted to evaluate all technical and programmatic elements of the project. In addition to financial audits and evaluation of progress toward anticipated outcomes, all internal processes will also be evaluated to ensure continuous process improvement. Status reports will be submitted to the WUE program office as required.

A-8 Qualifications of the Applicant and Cooperators

The Compton Municipal Water Department has successfully implemented several water-use efficiency projects over the past several years. The vast majority of these projects have involved the distribution of free water saving devices to residential customers. This project will facilitate the City's ability to augment past programs, significantly increase water-use efficiency and extend an incentives program to the CII customers. Many attribute the City's past program successes to its long-term partnership relationship with ExPERT, Inc.

By definition, and from its inception, ExPERT is a partnership composed of a network of California water agencies, water and energy utilities, businesses, universities, and community groups. This optimizes ExPERT's ability to ensure that the design of projects are driven by needs that are identified by the community and created through a process of cooperation and collaboration. ExPERT's executive staff and management team provide an experience base of successfully executing over seventy five (75) water-use efficiency projects across several BMPs throughout Northern and Southern California over the past eight years. Resumes of key personnel are provided in the appendix.

While the City of Compton will serve as the lead public agency on this project, ExPERT will work in collaboration with the City as its implementation contractor. The City of Compton will have primary ownership and management authority over any facility affected by the project.

Table A-6
Compton CII WUE Project Schedule

<u>Task/Activity</u>	<u>Date(s)</u>
Grant Award	4/03
Contract Execution & Compton City Council Approval	4/03–9/03
Project Start-up	10/03
Staff Recruitment & Training	10/03–12/03
Community Outreach	11/03-duration
Project Implementation	
Customer Targeting and Market Strategy Development	1/04-3/04
Participant Recruitment & Training	4/04-6/04
CII Water-Use Survey Implementation	7/04-6/05
CII Customer Incentives Program Implementation	10/04-9/05
Final Report Submittal	10/05
Community Advisory Committee Meetings	Monthly
Board of Director's Meetings	Quarterly
Project Reviews & Evaluations	Semi-annually

A-9 Innovation

Most, if not all, of the water saving devices used for retrofitting in this project (e.g., ULFTs/urinals, pre-rinse spray valves, water pressurized brooms) have been recently verified to demonstrate innovative technologies that contribute to improved water-use efficiency throughout the State. As a methodology for implementation, our strategic approach to recruitment and training has proven to be one of the most cost effective approaches of increasing water-use efficiency, developing community awareness, and establishing/sustaining community capacity. This approach serves as a replicable model for projects statewide.

A-10 Agency Authority

1. Yes, the applicant (official signing A-2, Application Signature Page) has the legal authority to submit an application and to enter into a funding contract with the State.
2. The City of Compton was incorporated on May 11, 1888 and operates under a City Council/City Manager form of government, as stipulated by the City Charter.
3. No, the applicant is not required to hold an election before entering into a funding contract with the State.
4. No, the funding agreement will not be subject to review and/or approval by other government agencies. However, it will be subject to review and/or approval by the Compton City Council.
5. No, there is no pending litigation that may impact the financial condition of the applicant, the operation of the water facilities, or its ability to complete this project.

A-11 Operations and Maintenance

This section is not applicable and was intentionally left blank.

Application Part B
Engineering and Hydrologic Feasibility

(This section is not applicable and was intentionally left blank.)

***Application Part C
Plan for Completion of Environmental Documentation and
Permitting Requirements***

(This section is not applicable and was intentionally left blank.)

Application Part D
Need for Project and Community Involvement

D-1 Need for the Project

To date, there has been no comprehensive water-use efficiency initiative targeted to CII accounts in the City of Compton. Approximately 2,281 licensed businesses operate in the City of Compton. Leading industrial sectors include non-durable goods manufacturing and warehousing/distribution. This is attributable to the city's prime location within minutes of major goods movement modes, including sea, land and air which create superior linkages to national and international trade centers. Compton has a notable presence in food processing, products, manufacturing, cosmetics manufacturing, plastics manufacturing, electronic assembly, and heavy equipment distribution. The Compton Unified School District comprises 23 elementary schools, 8 middle schools, 3 high schools, 3 alternative schools, and 1 adult school. Additionally, Compton is also home to Compton Community College.

The City of Compton has one of the most diverse economics in the Southeast Los Angeles County sub-region, with the fourth largest number of basic industry clusters. In Compton these business represent 13 industry clusters. However, to date, there has been no comprehensive water-use efficiency/conservation initiative targeting Compton's commercial/industrial/institutional (CII) sector.

The purpose of this project is to develop and implement a customer targeting and marketing strategy to provide water-use surveys and customer incentives to commercial, industrial, and institutional accounts in the City of Compton.

The goals of this project are (1) to promote and advance the CALFED Bay-Delta Program at the grass-roots community level; (2) to recruit, train, and engage a team of qualified residents in the development and delivery of accepted BMP solutions for CII accounts; and (3) achieve a 10% project participation rate.

There are five (5) primary objectives in this project. These objectives are as follows:

- (1) Recruit, train, and deploy five to ten "Compton CII WUE Ambassadors"
- (2) Identify 500 CII accounts offering greatest opportunity for project success
- (3) Distribute and/or install 1000 ULFTs/Urinals
- (4) Distribute and/or install 250 pre-rinse spray valves
- (5) Distribute 250 water pressurized brooms

D-2 Outreach, Community Involvement, Support, Opposition

This project's outreach and community involvement is greatly enhanced through the City of Compton's strategic partnering relationship with ExPERT, Inc – a community-based nonprofit organization. ExPERT is widely recognized for its ability to effectively and efficiently inform and engage community discussion of pertinent water quality, water conservation, and water reliability issues at the "grassroots" level. ExPERT's mission is:

To coordinate training and education programs in water, energy, natural resources management, and other environmental disciplines; and to facilitate and enhance employment opportunities for a culturally diverse group of people.

Over the past eight years, ExPERT has designed project activities to preserve local flexibility, utilize incentive-based actions, build on existing water-use efficiency programs, and provide assurances of high water-use efficiency. Over 200 individuals have provided over 242,000 hours of service and BMP program implementation activities. The ExPERT model is considered to be one of, if not, the most cost effective and innovative approaches to instilling civic responsibility, mobilizing volunteerism, developing community awareness, and promoting individual and family empowerment. It is expected that the Compton CII WUE Project will be fully embraced and supported by the community with no opposition.

Application Part E
Water Use Efficiency Improvements and Other Benefits

E-1 Water Use Efficiency Improvements

Successful implementation of the Compton CII WUE Project will result in a reduction of water usage by CII accounts by an amount equal to 10% of baseline use of CII accounts in Compton Municipal Water Department's service area over a ten year period. Baseline use is defined as the use by CII accounts in 1989. Additionally, as a result of the customer education and information exchange process associated with the implementation of water-use survey, the anticipated improvement/modification of customer behavior will also result in improved water-use efficiency.

E-2 Other Project Benefits

The Compton CII WUE Project is a cost-effective and innovative approach to addressing critical problems at the community level, involving the community at-large in the implementation of collaborative projects that build capacity to achieve sustainability. In addition to these collateral (i.e., "other") benefits, project activities are designed to preserve local flexibility, utilized incentive-based actions, build on existing water-use efficiency programs and stimulate increased productivity in the City's CII sector.

Application Part F
Economic Justification: Benefits to Costs

F-1 Net Water Savings

The Compton CII WUE Project clearly demonstrates net water savings. These savings are primarily achieved by reducing the level of current water usage (i.e., conservation) among a target group of identified high-water users. Water-saving devices will be purchased and installed to the targeted group. These devices include ULFT/Urinals, pre-rinse spray valves, and water pressurized brooms. The estimated net water savings was derived as follows:

ULFT/Urinals		
Water Savings	50	gals/day/unit
	<u>x 312</u>	days/yr (assuming 6 days/wk)
	15,600	gals/yr
	<u>x 1000</u>	no. of units retrofitted
	15,600,000	total gals/yr
	= <u>47.85</u>	AF/yr
Pre-rinse Spray Valves		
Water Savings	75,000	gals/yr/unit
	<u>x 375</u>	no. of units retrofitted
	28,125,000	total gals/yr
	= <u>86.27</u>	AF/yr
Water Pressurized Brooms		
Water Savings	15.5	gals/min/unit (hose vs. hose/broom)
	<u>x 60</u>	min/dy
	930	gals/day
	<u>x 312</u>	days/yr (assuming 6 days/wk)
	290,160	
	<u>x 250</u>	no. of units distributed
	72,540,000	total gals/yr
	= <u>222.51</u>	AF/yr
	= <u>356.63*</u>	total AF/yr

* - See Table 3, column (d) (Net Annual Water Savings).

F-2 Project Budget and Budget Justification

The project budget and budget justification are provided in Table F-2.

F-3 Economic Efficiency

The quantifiable direct economic benefits of the Compton CII WUE Project accrue from estimated water conserved by the project, which will allow the Compton Municipal Water Department to reduce the amount of water purchased, diverted, or pumped from its most expensive current water supply source. The current cost is \$432/AF, while the anticipated future cost is \$513/AF.

In addition to the quantifiable direct economic benefits described in Sections F-1 and F-2 above, the Compton CII WUE Project is also expected to achieve third party economic benefits. The education and training elements of the project resulting from the integration of project ambassadors provides a cost-effective and innovative approach to addressing critical problems at the community level. Involving the community at-large in the implementation of collaborative projects will serve to build capacity and promote sustainability. In addition project activities are designed to preserve local flexibility, utilize incentive-based actions, build on existing water-use efficiency programs and stimulate increased productivity in the City's CII sector.

Table F-2
Project Budget and Justification

		WUE FUNDING	APPLICANT MATCH*	TOTAL
A. PARTICIPANT SUPPORT COSTS				
Participant Stipend	(5) participants @ \$800/bi-weekly	208,000	0	208,000
Unemployment Ins	@ 3.4%	7,072	0	7,072
FICA	@ 7.65%	15,912	0	15,912
Workers Comp	@ 6.7 %	14,016	0	14,016
Subtotal A		245,000	0	245,000
B. OTHER PARTICIPANT COSTS				
Training and Education	Project Orientation & BMP Training	5,000	0	5,000
Service Gear	Project Uniforms & Safety Gear	5,000	0	5,000
Subtotal B		10,000	0	10,000
C. STAFF COSTS				
Salaries & Wages	Project Manager	0	33,000	33,000
	Project Assistant	0	15,000	15,000
Fringe Benefits	@ 2.9%	0	1,400	1,400
Training	@ 1.3%	0	600	600
Subtotal C		0	50,000	50,000
D. OPERATIONS COSTS				
Transportation	Fuel & Maint. of Company Vans	10,000	0	10,000
BMP Implementation	CII Surveys	0	0	0
	CII Retrofit Incentives	155,000	0	155,000
Supplies and Equipment	Forms, Supplies, Stationary, etc.	15,000	0	15,000
Other	Space rental, utilities, phone/fax	15,000	0	15,000
Subtotal D		195,000	0	195,000
E. INTERNAL EVALUATION				
	Evaluations, audits, and reviews	10,000	0	10,000
F. ADMINISTRATION				
	@ 14.2%	90,000	0	90,000
TOTAL PROJECT OPERATING COSTS		460,000	50,000	510,000
TOTAL PROJECT BUDGET		<u>550,000</u>	<u>50,000</u>	<u>600,000</u>

* - Applicant In-kind and/or cash match.

Appendix

Table 1: Capital Costs

Table 2: Annual Operations and Maintenance Costs

Table 3: Total Annual Costs

Table 4: Water Supply Benefits

Table 5: Benefit/Cost Ratio

Table 6: Capital Recovery Factor

Resumes

Table 1: Capital Costs

	Capital Cost Category (a)	Cost (b)	Contingency Percent (c)	Contingency \$ (d)	Subtotal (e)
				(bxc)	(b+d)
(a)	Land Purchase/Easement				
(b)	Planning/Design/Engineering				
(c)	Materials/Installation	148,625	4.3	6,375	155,000
(d)	Structures				
(e)	Equipment Purchases/Rentals	5,000			5,000
(f)	Environmental Mitigation/Enhancement				
(g)	Administration/Overhead	100,000			100,000
(h)	Project Legal/License Fees				
(i)	Other:				
	Participant Stipends 245,000				
	Other Participant Costs 10,000				
	Project Staff Costs 50,000				
	Transportation Costs 10,000				
	Project Supplies 10,000				
	Rent, Utilities, Phone/Fax 15,000	340,000			340,000
(j)	Total (1) (a + ... + i)	593,625			600,000
(k)	Capital Recovery Factor: use Table 6	0.1359			0.1359
(l)	Annual Capital Costs (j x k)	80,674			81,540

(1) Costs must match Project Budget prepared in Section F-2.

Table 2: Annual Operations and Maintenance Costs

Administration (a)	Operations (b)	Maintenance (c)	Other (d)	Total (e)
0	0	0	0	0

Table 3: Total Annual Costs

Annual Capital Costs (1) (a)	Annual O&M Costs (2) (b)	Total Annual Costs (c) (a+b)
81,540	0	81,540

(1) From Table 1 line (l)

(2) From Table 2 Total, column (e)

Table 4: Water Supply BenefitsNet water savings (acre-feet/year) 356.63**4a. Avoided Costs of Current Supply Sources**

Sources of Supply <i>(a)</i>	Cost of Water (\$/AF) <i>(b)</i>	Annual Displaced Supply (AF) <i>(c)</i>	Annual Avoided Costs (\$) <i>(d)</i> <i>(b x c)</i>
MWD	432	356.63	154,224
Total			154,224

4b. Alternative Costs of Future Supply Sources

Future Supply Sources <i>(a)</i>	Total Capital Costs (\$) <i>(b)</i>	Capital Recovery Factor (1) <i>(c)</i>	Annual Capital Costs (\$) <i>(d)</i> <i>(b x c)</i>	Annual O&M Costs (\$) <i>(e)</i>	Total Annual Avoided Costs (\$) <i>(f)</i> <i>(d + e)</i>
MWD				513	183,141
Total					183,141

(1) 6% discount rate; Use Table 6- Capital Recovery Factor

4c. Water Supplier Revenue (Vendibility)

Parties Purchasing Project Supplies (a)	Amount of Water to be Sold (b)	Selling Price (\$/AF) (c)	Expected Frequency of Sales (%) (1) (d)	Expected Selling Price (\$/AF) (e) (c x d)	"Option" Fee (\$/AF) (2) (f)	Total Selling Price (\$/AF) (g) (e + f)	Annual Expected Water Sale Revenue (\$) (h) (b x g)
n/a							
Total							0

(1) During the analysis period, what percentage of years are water sales expected to occur? For example, if water will only be sold half of the years, enter 50% (0.5).

(2) "Option" fees are paid by a contracting agency to a selling agency to maintain the right of the contracting agency to buy water whenever needed. Although the water may not be purchased every year, the fee is usually paid every year.

4d: Total Water Supply Benefits

(a) Annual Avoided Cost of Current Supply Sources (\$) from 4a, column (d)	154,224
(b) Annual Avoided Cost of Alternative Future Supply Sources (\$) from 4b, column (f)	183,141
(c) Annual Expected Water Sale Revenue (\$) from 4c, column (h)	0
(d) Total Annual Water Supply Benefits (\$) (a + b + c)	337,365

Table 5: Benefit/Cost Ratio

Project Benefits (\$) (1)	337,365
Project Costs (\$) (2)	81,540
Benefit/Cost Ratio	4.14

(1) From Tables 4d, row (d): Total Annual Water Supply Benefits

(2) From Table 3, column (c) : Total Annual Costs

Table 6: Capital Recovery Factor

(Use to obtain factor for Table 1, Line k or Table 4b, Column (c))

Life of Project (in years)	Capital Recovery Factor
7	0.1791
8	0.1610
9	0.1470
10	0.1359
11	0.1268
12	0.1193
13	0.1130
14	0.1076
15	0.1030
16	0.0990
17	0.0954
18	0.0924
19	0.0896
20	0.0872
21	0.0850
22	0.0830
23	0.0813
24	0.0797
25	0.0782
26	0.0769
27	0.0757
28	0.0746
29	0.0736
30	0.0726
31	0.0718
32	0.0710
33	0.0703
34	0.0696
35	0.0690
36	0.0684
37	0.0679
38	0.0674
39	0.0669
40	0.0665
41	0.0661
42	0.0657
43	0.0653
44	0.0650
45	0.0647
46	0.0644
47	0.0641
48	0.0639
49	0.0637
50	0.0634

